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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,763	07/19/2004	Gunter Holzemann	MERCK-2903	3011

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EXAMINER	
CHANG, CELIA C	

ART UNIT	PAPER NUMBER
1625	

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09/26/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/501,763	HOLZEMANN ET AL.	
	Examiner	Art Unit	
	Celia Chang	1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,11-14,16-18,21-23 and 25* is/are pending in the application.

4a) Of the above claim(s) *11,13,14,17 and 18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7, 12, 16, 21-23 and 25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This application is a RCE of SN 10/501,763.

Claims 8-10, 15, 19-20, 24 have been canceled. Claims 11, 13-14, 17-18 stayed withdrawn per 37 CFR 1.142(b). Claims 1-7, 12, 16, 21-23 and 25 are pending.

2. Claims 21-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

The claims lacks antecedent basis for isolated or mixture of stereoisomers. Applicants argued that the specification provided description that ***were*** there any stereoisomers, they can be isolated in conventional manner i.e. on page 8 and 21-22. However, nowhere in formula I as now amended were there any chiral center nor were there substituents described would create a chiral center. There is no antecedent basis for chiral center located in the molecules as described in the specification. Since there has no chiral center, there cannot be any mixture or isolated stereoisomer.

3. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

It was clearly delineated in the restriction requirement that multiple active ingredient composition is independent and distinct because they have a combined utility of the multiple active ingredient and is not dependent solely on the compound per se. For example, a combination composition of antiallergic drug and pain reliever is a combination restrictable from the subcombination. Please note that for the utility of treating allergy, the combination does not required the particulars of pain reliever (MPEP 808.02(1)) and each subcombination have utility by itself one for allergy, one for pain (MPEP 808.02(2)). Therefore, it is erroneous to allege that two *active* ingredient composition is a "combination" of the two subcombination containing

single active ingredients, therefore, not restrictable. In biologically active compounds, interaction between active ingredients and co-action of active ingredients gave merits to combination composition to be patentably distinct inventions.

In addition, the only description for a combination composition is found on page 23, line 24, "and at least one further medicament active ingredient". This description lacks "what" the additional medicament is, how much, how was it incorporated, etc. Without knowing what it is, how it is incorporated, what are the ratio between the multiple active ingredients, the specification lacks antecedent basis and enablement for a single composition containing multiple active ingredients.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7, 11-12, 16, 21-23, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgarth et al. EP 649,838 (recited on 1449) supplemented with CA 123:198635 in view of Cross et al. US 4,959,366 supplemented with Liu et al. 2000, Liu et al. 2002 and Dougherty et al. US 2004/0180401 (provisional date May 2002).

Determination of the scope and content of the prior art (MPEP §2141.01)

Baumgarth et al. and Cross et al. '366, Liu et al. and Dougherty et al. are analogous art in the same field of endeavor of compounds affecting the arrhythmic process of the heart. Baumgarth et al. '838 generically disclosed the claimed compounds, see p.3 formula I and provided multiple examples for the generic scope (see CA 123:198635).

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the instant claims and the prior art is that instead of identically substituted on the two terminal phenyl rings, the instant claims are drawn to one limited to sulfonamide and the other is other than sulfonamide. Generically Baugmarth et al. taught that the substitution on the two terminal Ar are "independent' (see Baugmarth et al. '838, p.3 line 19), thus, does not have to be identical. Corss et al. taught in analogous compounds, the substituents can be different without affecting biological activity (see col. 15-16 compound 2 vs col. 23-24 compound 15). Liu et al. taught that in structural-activity relationship, it was found that variation of substitution on the pharmaco-core would not compromise activity. Dougherty et al. '401 drawn from these prior art and delineated all the teaching from Baumgarth et al. EP 649,838 and Cross et al. US 4,95,366 and displayed them in a side-by-side manner. One skilled in the art in possession of the prior art references is in possession of the conclusion by Dougherty et al. that the same compound as exemplified by conventional art which has heart rhythm effective activity (see p. 10 right column last compound) can be symmetrically as well as asymmetrically substituted (see page 10 examples).

Finding of prima facie obviousness---rational and motivation (MPEP§2142-2143)

One having ordinary skill in the art is deemed to be aware of all the pertinent art in the field. The above references placed the heart rhythm active compounds in the possession of artisan in the field. The modification of one proven compound with another proven compound guided by the conventional structure-activity attributes is prima facie obvious. In absence of unexpected results, there is nothing unobvious in choosing some i.e. symmetrically substituted among many i.e. symmetrical as well as unsymmetrical substituted of Baumgarth et al. for the art recognized utility. In re Lemin 141 USPQ 814.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celia Chang, Ph. D. whose telephone number is 571-272-0679. The examiner can normally be reached on Monday through Thursday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet L. Andres, Ph. D., can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OACS/Chang
Sept. 16, 2008

/Celia Chang/
Primary Examiner
Art Unit 1625